

What is claimed is:

1. An image forming apparatus for forming a toner image on a sheet-like recording medium, said image forming apparatus comprising:

a plurality of image carriers arranged side by side;
charging means, exposing means and developing means arranged around each of said plurality of image carriers for respectively charging an associated one of said plurality of image carriers, forming a latent image on said associated image carrier and developing said latent image with toner to thereby produce a corresponding toner image;
and

image transferring means for sequentially transferring toner images formed on said plurality of image carriers to the recording medium one above the other;

wherein said image transferring means comprises an image transfer belt and a plurality of bias applying members for applying image transfer biases to image transfer nips formed between said plurality of bias applying members and said plurality of image carriers, which face each other with the intermediary of said image transfer belt,

said plurality of image transferring members each has an axis positioned downstream, in a direction of movement of said image transfer belt, of a virtual vertical

line extending from an axis of an associated one of said plurality of image carriers downward, and

at least two of said plurality of bias applying members are provided with respective belt holding members positioned downstream of said two bias applying members in the direction of movement of said image transfer belt.

2. The apparatus as claimed in claim 1, further comprising a plurality of pressing means for respectively pressing said plurality of bias applying means against said plurality of image carriers, wherein a position of each belt holding member and a pressure of each bias applying means are selected such that a width over which said image transfer belt is caused to wrap around each image carrier by said bias applying member associated with said image carrier is greater when said belt holding member is mounted than when said belt holding member is dismounted.

3. The apparatus as claimed in claim 1, further comprising a plurality of pressing means for respectively pressing said plurality of bias applying means against said plurality of image carriers, wherein a distance from an axis of each image carrier to each bias applying member is greater when said belt holding member is dismounted than when said belt holding member is mounted.

4. The apparatus as claimed in claim 1, wherein each bias applying member contacts said image transfer belt

within a width over which said image transfer belt wraps around said image carrier.

5. The apparatus as claimed in claim 1, wherein each bias applying means comprises an image transfer roller.

6. The apparatus as claimed in claim 1, wherein each belt holding member is supported by a resilient member.

7. In an image forming apparatus for transferring an image formed on one image carrier on a belt-like image transfer body passed over a plurality of support members by applying an image transfer bias to a bias applying member that faces said image carrier with the intermediary of said image transfer body, and transferring an image formed on another image carrier located downstream of said one image carrier in a direction of movement of said image transfer body above said image with a same configuration, an axis of said bias applying member is shifted from a virtual vertical line extending from an axis of said image carrier downward to a downstream side in a direction of movement of said image transfer body, and an image transfer body holding member is positioned downstream of said bias applying means for pressing said image transfer body toward said image carrier to thereby cause said image transfer body to wrap around said image carrier over a preselected range downstream of a center of an image transfer nip.

8. The apparatus as claimed in claim 7, wherein a width over which said image transfer body wraps around said image carrier at a position upstream of the image transfer nip in the direction of movement of said image transfer body is greater than when said bias applying member is positioned on the vertical line.

9. The apparatus as claimed in claim 7, further comprising pressing means for pressing said bias applying member, wherein a substantially entire amount of wrapping of said image transfer body around said image carrier is established by a pressure of said image transfer holding member to thereby allow said bias applying means to exert a minimum necessary pressure on said image carrier.

10. The apparatus as claimed in claim 7, wherein said image transfer body holding member is fixed in position in both directions in a direction of thickness of said image transfer body.

11. The apparatus as claimed in claim 7, wherein said transfer body holding member is biased toward said image carrier by an elastic member.

12. The apparatus as claimed in claim 11, wherein said image transfer body conveys a sheet-like recording medium to thereby allow the images to be transferred to said recording medium, and a bias of said elastic member is selected such that said image transfer body holding

member moves away from said image carrier in accordance with a thickness of said recording medium.

13. The apparatus as claimed in claim 7, wherein said image transfer body holding member is biased toward said image carrier and configured to be unmovable toward said image carrier in a direction of thickness of said image transfer body, but movable in an opposite direction.

14. The apparatus as claimed in claim 13, wherein said image transfer body holding member comprises a roller rotatably supported by a bearing, which is biased by said elastic member and fixed in position at a preselected position by a stop.

15. The apparatus as claimed in claim 13, wherein said image transfer body conveys a sheet-like recording medium to thereby allow the images to be transferred to said recording medium, and a bias of said elastic member is selected such that said image transfer body holding member moves away from said image carrier in accordance with a thickness of said recording medium.

16. The apparatus as claimed in claim 7, wherein said image transfer body conveys a sheet-like recording medium to thereby allow the images to be transferred to said recording medium, said image transfer body holding member comprises a roller provided with an elastic layer, said image transfer body holding member has an axis fixed in

position in both directions in a direction of thickness of said image transfer body, and elasticity of said elastic layer is selected such that a position of said image transfer body holding member adjacent to said image carrier is movable away from said image carrier in accordance with a thickness of said recording medium.

17. The apparatus as claimed in claim 7, wherein said image transfer body holding member is formed of a material that substantially does not electrically operate in relation to an image transfer body applied to said bias applying member.

18. The apparatus as claimed in claim 17, wherein said image transfer body holding member is provided with a medium-resistance layer on at least a surface thereof.

19. In an image transferring unit comprising a belt-like image transfer body passed over a plurality of support members and having a surface movable via a plurality of image carriers, which are mounted on a body of an image forming apparatus side by side, and a plurality of bias applying members respectively facing said plurality of image carriers with the intermediary of said image transfer body and applied with biases for transferring images formed on said plurality of image carriers, an axis of each bias applying member is shifted from a virtual vertical line extending from an axis of an

associated image carrier downward to a downstream side in a direction of movement of said image transfer body, and an image transfer body holding member is positioned downstream of said bias applying member for pressing said image transfer body toward said image carrier to thereby cause said image transfer body to wrap around said image carrier over a preselected range downstream of a center of an image transfer nip.

20. The apparatus as claimed in claim 19, wherein a width over which said image transfer body wraps around said image carrier at a position upstream of the image transfer nip in the direction of movement of said image transfer body is greater than when said bias applying member is positioned on the vertical line.

21. The apparatus as claimed in claim 19, further comprising pressing means for pressing said bias applying member, wherein a substantially entire amount of wrapping of said image transfer body around said image carrier is established by a pressure of said image transfer holding member to thereby cause said bias applying means to exert a minimum necessary pressure on said image carrier.